Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A spectral ellipsometer comprising: a refractive illuminating optical system for an illuminating ray bundle, coming from an illumination unit, for generating a measurement spot on a surface of a specimen; and a detector unit that receives and detects, as a measured ray bundle, the light reflected from the surface at the location of the measurement spot, wherein the illuminating optical system is color-corrected.

2. (Previously Presented) The spectral ellipsometer as defined in Claim 1, wherein the color-corrected illuminating optical system is a lens doublet or a lens triplet.

3. (Previously Presented) The spectral ellipsometer as defined in Claim 1, wherein the color-corrected illuminating optical system is made of glass having at least one of high transmission in the UV range and an anti-reflection coating.

4. (Previously Presented) The spectral ellipsometer as defined in Claim 1, wherein the color-corrected illuminating optical system is constructed from individual refractive optical elements that are joined with a cement having high transmission in the UV range.

5. (Previously Presented) A spectral ellipsometer comprising: a refractive illuminating optical system for an illuminating ray bundle, coming from an illumination unit, for generating a measurement spot on a surface of a specimen; and a detector unit that receives and detects, as a measured ray bundle, the light reflected from the surface at the location of the measurement spot, wherein the illuminating optical system is color-corrected, and wherein a receiving optical system that is color-corrected is provided for the measured ray bundle.

6. (Previously Presented) The spectral ellipsometer as defined in Claim 5, wherein the color-corrected receiving optical system is a lens doublet or a lens triplet.

7. (Previously Presented) The spectral ellipsometer as defined in Claim 5, wherein the color-corrected receiving optical system is made of glass having at least one of high transmission in the UV range and an anti-reflection coating.

8. (Previously Pr sent d) The spectral ellipsometer as defined in Claim 5, wherein the color-corrected receiving optical system is constructed from individual refractive optical elements that are joined with a cement having high transmission in the UV range.

9. (Previously Presented) The spectral ellipsometer as defined in Claim 1, characterized in that it is used to measure material parameters of thin layers applied onto the specimen surface.

10. (New) A spectral ellipsometer comprising:

a refractive illuminating optical system for an illuminating ray bundle, coming from an illumination unit, for generating a measurement spot on a surface of a specimen; and

a detector unit that receives and detects, as a measured ray bundle, the light reflected from the surface at the location of the measurement spot,

wherein the illuminating optical system is color-corrected over a spectral range from approximately ultraviolet to approximately infrared.

11. (New) The spectral ellipsometer as defined in Claim 10, wherein the measurement spot has a dimension not greater than approximately 100 μm.

12. (New) The spectral ellipsometer as defined in Claim 1, wherein the measurement spot has a dimension not greater than approximately 100 μm.